

Abstract of the Disclosure

De-interlacing is effected by determining the motion at each missing pixel and, then, interpolating the missing lines to convert an interlaced field to a progressive frame.

The interpolation employed for luminance is determined through motion detection. If

5 motion is detected in the image field based interpolation is used and if no motion of the image is detected frame interpolation is used. Specifically, the interpolation is determined by employing a motion metric. The motion metric at a missing pixel is defined by using a prescribed combination of pixel luminance value differences. A spatial median filter is then used to remove objectionable noise from the pixel luminance

10 value differences and to fill in so-called "holes" in the image. Indeed, the spatial median filter can be considered as providing a measure of the overall effect of all pixels that make up the object of the image.